REMARKS

The above amendment amends the specification to correct errors and improve clarity. The specification is further amended to use reference numbers 100 and 124, which were shown in the drawings as filed. No new matter is added.

Applicants request approval of amendment of Fig.2, which is shown on the accompanying replacement sheet 1/2. Fig. 2 in replacement sheet 1/2 is amended to add a reference number 226, which was used in the specification as filed. No new matter is added by the amendment to the drawings.

Claims 1-15 were pending in the above-identified application when examined and are amended as indicated above. The claim amendments clarify the claim language and are not intended to limit the scope of the claims.

The Examiner objected to the drawings as failing to comply with 37 CFR 1.84(p)(5). In particular, the Examiner noted that reference numbers 100 and 124, which appear in the drawings, did not appear in the specification as filed. In response, Applicants have amended the specification as noted above to use reference numbers 100 and 124. The Examiner further noted that the specification used a reference number 226 that did not appear in the drawings. In response, Fig. 2 is being amended as noted above to add the reference 226 for the leads that were already shown in Fig. 2. In view of the amendments to the specification and drawings, Applicants request reconsideration and withdrawal of the objection to the drawings.

The specification was objected to for containing informalities. In response, Applicants have amended the specification and claims to correct the informalities as follows: (1) the specification is amended to consistently use reference number 220 for the demonstration cable shown in Fig. 2; (2) paragraph **[0007]** is amended as suggested by the Examiner to replace "demonstration contains" with --demonstration cable contains--; and (3) the term "socket" in claims 4 and 5 has been replaced with the term --connector-- to improve consistency between the specification and the claims. In view of the above amendments, Applicants request reconsideration and withdrawal of the objection to the specification.

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Claims 4 and 11 were objected to as containing informalities. In response, Applicants have amended claim 4 as the Examiner suggested to replace "demonstration" with --demonstration system-- and have amended claim 11 as the Examiner suggested to replace "comprising" with --comprising the steps of--. In view of these amendments, Applicants request reconsideration and withdrawal of the objection to the claims.

Claims 1-6 and 10-15 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent No. 6,753,903 (Lin) in view of U.S. patent No. 6,747,752 (Farago). Applicants respectfully traverse the rejection.

Independent claim 1 distinguishes over the combination of Lin and Farago at least by reciting, "a controller of a type employed in the cable that connects the peripheral to the host computer during normal operation."

Lin discloses an adaptor that provides a direct connection between digital still camera (DSC) and a printer, so that the adapter cable eliminates the need for a host computer. For example, Lin beginning at column 3, line 37 states, "an adaptor for a direct USB (Universal Serial Bus) data transmission between a USB digital still camera and a USB color printer can indeed be a money-saving alternative to a PC (Personal Computer)."

Farago is directed to inclusion of coupons or other useful additions in the printer data in conventional demonstration control devices for printers. Farago further discloses such demonstration control devices as including custom ASICs. For Example, Farago beginning at column 2, line 21 states, "The adjunct device, the logic module or part of the adjunct device may be built into one or more custom ASIC chips ... that include all relevant functions."

Lin and Farago separately and in combination fail to suggest the demonstration system of claim 1 because neither reference suggests use of a controller of the type employed in a cable that connects the peripheral to the host computer during normal operation. As noted above, Lin discloses a control system that intervenes between two peripherals (i.e., a camera and a printer) and replaces the functions of a host computer, and Farago discloses a demonstration system using custom control circuitry (ASICs). Neither suggests "a controller of a type employed in the cable that connects the peripheral to the host computer during normal operation."

In accordance with an aspect of Applicants' invention, the cost of a demonstration system can be reduced through use of a controller of the type used during normal operations between a host computer and a printer. Cost savings particularly result because

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a peripheral cable controller would generally be produced in greater quantities than would ASICs or other custom designed circuits for demonstration system. Further, the cost of custom design work for the demonstration system control can be reduced or avoided. Lin and Farago fail to suggest these advantages.

In the office action, the Examiner identified the controller recited in claim 1 as corresponding to controller 11, which Fig. 1 of Lin shows in a cable 1 connecting a camera 2 to a printer 3. However, as noted above, Lin teaches that cable 1 including controller 11 replaces the host computer and does not connect a host computer to a peripheral. In this regard, the Examiner indicated, "camera 2 performs the actions of a host computer – wherein the camera is a computing alternative to a personal computer." The Examiner then cited Lin starting column 2, line 41 as suggesting camera 2 as a replacement for a host computer, but to the contrary, the cited portion of Lin suggests cable 1 (not camera 2) as the replacement for a host computer. Further, Applicants respectfully submit that Lin provides no suggestion that camera 2 corresponds to or is capable of performing the interface functions of a host computer. For example, if camera 2 were capable of performing the printer interface functions of a host computer, the additional expense of an intelligent cable 1 is unnecessary.

Independent claim 1 and claims 2-6 and 10, which depend from claim 1, are thus patentable over the combination of Lin and Farago.

Independent claim 11 distinguishes over Lin and Farago by reciting, "A method of making a demonstration system for a printer, comprising ...: connecting to the printer a cable containing a controller that is of a type used in a printer cable that connects the printer to a host computer during normal operation of the printer; storing demonstration data in a memory; and connecting the memory to the cable to enable the controller to read the demonstration data from the memory and format the data for the printer."

Lin and Farago fail to suggest a demonstration system using a controller that is of a type used in a printer cable that connects the printer to a host computer during normal operation. Instead, Lin discloses a camera-printer system using a controller that replaces a host computer, and Farago discloses a demonstration system including custom ASICs for control functions. Claim 11 is thus patentable over the combination of Lin and Farago.

Claims 12-15 depend from claim 11 and are patentable over the combination of Lin and Farago for at least the same reasons that claim 11 is patentable over the combination of Lin and Farago.

For the above reasons, Applicants request reconsideration and withdrawal of this rejection under 35 U.S.C. § 103.

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Claims 7-9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Lin in view of Farago and further in view of U.S. patent No. 5,872,945 (Wett). Applicants respectfully traverse the rejection.

Claims 7-9 depend from claim 1, which is patentable over Lin and Farago for the reasons given above. In particular, Lin and Farago fail to suggest a demonstration system using a controller that is of a type used in a printer cable that connects the printer to a host computer during normal operation. Wett is directed to a bus translator, particularly, for translation from an MX bus to a system bus protocol. Wett does not disclose or suggest either a demonstration system or a controller that is of a type used in a printer cable that connects the printer to a host computer during normal operation. Accordingly, Wett does not provide the elements of claim 1 that are missing from the combination of Lin and Farago. Claim 1 and claims 7-9, which depend from claim 1, are thus patentable over the combination of Lin, Farago, and Wett.

Claim 7 further recites, "the controller is operable in a first mode and a second mode, wherein in the first mode, the controller boots from an internal memory, and in the second mode, the controller boots from the external memory." In regard to this element, the Examiner stated, "It would have been obvious ... to add the second boot mode of Wett into ... the demonstration system of Lin and Farago. The motivation for doing so would have been to make the system ... flexible and customizable." However, Applicants can find no suggestion from the combination of Lin, Fargo, or Wett that a second boot mode would desirable or would provide a more flexible or customizable demonstration system. For example, Farago, which is the only one of the references directed to a demonstration system, discloses use of a custom designed ASICs. The ASICs can thus be designed to provide the desired functions, without the need of alternative boot modes. Wett, on the other hand, is not directed demonstration system but to a circuit that may be used in different environments or applications. The combination of Lin, Farago, and Wett fail to suggest that flexibility of alternative boot modes, which are generally desirable for the controller described by Wett, is applicable to a demonstration system.

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In accordance with an aspect of Applicants' invention, a controller can be used in either a peripheral cable or a demonstration system. Such use in a demonstration system reduces the cost by avoiding the need to design and fabricate custom control circuitry for the demonstration system. The controller having dual boot modes does provide flexibility for a controller alternatively used in a cable or a demonstration system, but this is seen with hindsight after Applicants' invention. Lin, Farago, and Wett provide no suggestion

of such alternative uses of a controller for a peripheral cable or a demonstration system. Accordingly, claim 7 and claims 8 and 9, which depend from claim 7 are patentable over the combination of Lin, Farago, and Wett.

For the above reasons, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103.

In summary, claims 1-15 were pending in the application. This response amends claims 4, 5, and 11 to improve their form. For the above reasons, Applicants respectfully request allowance of the application including claims 1-15.

EXPRESS MAIL LABEL NO:

ED 536 990 668 US

Respectfully submitted,

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AMENDMENTS TO THE DRAWINGS

Amendments to the drawings are on the attached replacement sheet 1/2 as follows.

Fig. 2 is amended to add a reference number 226 to identify leads that are referred to in the specification as filed.

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